

U.S. Patent Application No. 10/789,679
Attorney Docket No. 347269-991440

REMARKS

Claims 1-4, 19-21, and 25-27 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0057888 to *Archenhold et al.* ("*Archenhold*"). Claims 12-13 have been rejected under 35 U.S.C. § 103(a) as being obvious in light of *Archenhold* in view of U.S. Patent No. 6,362,575 to *Chang* ("*Chang*"). Applicant respectfully submits that neither *Archenhold* nor *Chang* discloses all elements of the claims as amended. More specifically, neither *Archenhold* nor *Chang* discloses a current restricting unit that changes a path of current flowing through a lamp unit when an amount of the current is larger than a predetermined magnitude.

Applicant thanks Examiner for his reply phone message identifying the *Chang* patent as the true subject of the rejection under 35 U.S.C. § 103(a). Accordingly, Applicant's response herein refers to the *Chang* patent, and not to U.S. Patent No. 6,285,141.

Archenhold

Archenhold discloses an illumination control system for driving loads such as LEDs. A microprocessor control unit 2 receives input from a load current feedback module 1 and directs a load drive section 5 to apply pulses from a pulse signal generator module 4 to the load 6. In operation, the microprocessor control unit 2 monitors the load current and sends a pulse amplitude modulation (PAM) signal to the load drive section 5. Thus, *Archenbold* discloses a PAM-controlled load 6.

However, note that the system of *Archenbold* does not change the path of current flowing through the load. Instead, PAM controllers control the load 6 by changing the amplitude, not the path, of current flow. Pulse signals always travel from the pulse signal generator module 4 to the load drive section 5 and on to the load 6 – only the amplitude is varied.

Chang

Chang discloses a circuit for regulating the voltage output to multiple discharge lamps. With reference to FIG. 2, *Chang* discloses a lamp current sensor S that informs a control circuit/reference voltage generator 19 of the total lamp filament current (Col. 6:1-4, 19-22). The

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generator 19 outputs a reference voltage V_{ref} to a compensator/controller circuit 22, which processes V_{ref} into a control voltage output to a voltage controlled oscillator 27 and on to a transistor drive circuit 30 (Col. 6:27-55). This drive circuit 30 controls transistors Q2, Q3 so as to alternately apply or cut off voltage to the lamps (Col. 6:56-60).

Similar to *Archenbold*, the system of *Chang* controls the amplitude of the voltage signal applied to the lamps (i.e., on or off), and not the path of current applied. That is, the voltage signals of *Chang* always travel the same path through transistors Q2, Q3 – only their amplitudes are varied.

Archenbold and *Chang* thus disclose varying the amplitude of a signal, and not the path by which it is applied. For at least this reason, independent claims 1 and 27 as amended are patentable over *Archenbold* and *Chang* for at least the reasons that they disclose a current restricting unit that “changes a path of a current flowing through the lamp unit” Similarly, independent claim 21 is patentable for at least the reason that it discloses a current restricting subunit that “changes a path of a first current flowing through the first lamp” Likewise, independent claim 26 is patentable for at least the reason that it discloses a method in which “a path of a current flowing through each lamp is changed”

Claims 2-20 and 22-25 depend from claims 1 and 21, respectively, and are thus patentable for at least the same reasons as above.

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CONCLUSION

In view of the above, it is respectfully submitted that Claims 1-27 are now in condition for allowance.

The Examiner is invited to call Applicant's attorney at the number below in order to speed the prosecution of this application.

The Commissioner is authorized to charge any deficiencies in fees and credit any overpayment of fees to Deposit Account No. 07-1896.

Respectfully submitted,

DLA PIPER RUDNICK GRAY CARY U.S. LLP

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By: _____

Jon V. Ikegami

Reg. No. 51,115

Attorney for Applicants

DLA PIPER RUDNICK GRAY CARY U.S. LLP
2000 University Avenue
East Palo Alto, CA 94303
Telephone: (650) 833-2104